

Date: Tuesday, 27/05/2008 2:47:19 PM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : DUAL MIRROR ASSEMBLY
Job Number : 39518	
Estimate Number : 12278	
P.O. Number :	Part Number : D206558043
This Issue : 27/05/2008 S.O. No. :	Drawing Number : 206-558 P4-6/D2066
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL / MED FAB	Drawing Revision : C / B
Previous Run : 35353	Material :
Written By :	Due Date : 10/06/2008 Qty: 6 Um: Each
Checked & Approved By : <u>TWO 08.5.27</u>	
Comment : Est. G02.09.19 Re-format; Incorporated D2066 KJ Est Rev:H 08-05-14 now @ chg006/ add D3778-1 per ECN1171 DD verified:	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-558-043 CHG006

08/06/02 08.5.29 SLD

2.0	D2011101	6" Mirror
-----	----------	-----------

**Comment:** Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Mirror 6"

Pick:

Qty	Part Number	Description	Batch
2	D2011-101	Mirror Ass'y 6"	<u>38288</u>

SLD

3.0	D2052	Mounting Bracket
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**Comment:** Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Bracket

Batch

36617SLD

4.0	D2054	Bushing
-----	-------	---------

**Comment:** Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Bushing - Delrin

Batch

31219394338/5/29SLD

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D2055

Clamp



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Clamp

Batch 34365

SP

6.0

D2056

Bell Crank



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Bell Crank Assembly

Batch 37721

SP

7.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Washer

Pick:

Qty Part Number

Description

Batch

4 AN960JD10

Washer

108077

SP

8.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Nut

Pick:

Qty Part Number

Description

Batch

2 MS21042L3

Nut

107644

or MS21042-3

SP

9.0

MS27039118

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Screw

Pick:

Qty Part Number

Description

Batch

2 MS27039-1-18

Screw

106112

8/5/29

SP

(6x)

10.0

M304TR0500W035

304 RD Tube .500 x .035W



Comment: Qty.: 2.8000 f(s)/Unit Total : 28.0004 f(s)

304 RD Tube .500 x .035W

304/316 SS Seamless Tube

(Ref. QSI 017 4.1.1.2) as per Dwg D2066 using punch Jig DT8012.

SP 08/05/29

(6)

Dart Aerospace Ltd

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Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

Identify as D2066.

Batch: M107790

Deburr and Polish

Note: Punch 1 end only at this time.

SB 08/05/29

(6)

11.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Punch 1/2" OD x .035 " Wall

Slide on parts D2052, D2055, D2056, D2054 as per Dwg D206-558

Note orientation of belcrank and order of parts.

Punch other end to length (28.62") as per Dwg D2066

Use template DT8054

SB 08/05/29

(6)

12.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Flatten the ends on Hydraulic press using DT8545

Bend per Dwg D2066 using template D2066T1

Deburr

Drill 3/16" Dia holes per D2066T1 template and Dwg D2066

Deburr holes

Assemble remaining parts as per Dwg D206-558

EP 08/06/02

(6)

FF 08-05-30

(6)

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/06/02 46
08/05/30 46

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

15.0

D2053

Mounting Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 40.0000 Each(s)

Bracket

Pick: Packing Kit

Qty Part Number Description Batch

1 D2053 Bracket

35362

AS 08/05/30

(6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 39518

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

D37781

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total: ~~10.0000~~ 6 Each(s)

Bracket

batch: 39283

17.0

D2067

Connector



Comment: Qty.: 1.0000 Each(s)/Unit Total: ~~10.0000~~ 6 Each(s)

Connector

Pick: Packing Kit

Qty Part Number

Description

Batch

1

D2067

Connector

37483

18.0

D2071

Cable Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: ~~10.0000~~ 6 Each(s)

Cable Assembly

Pick: Packing Kit

Qty Part Number

Description

Batch

1

D2071

Cable

B38289

19.0

AN34A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total: ~~40.0000~~ 24 Each(s)

Bolt

Pick: Packing Kit

Qty Part Number

Description

Batch

4

AN3-4A

Bolt

M103641

20.0

AN5261032R9

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total: ~~40.0000~~ 24 Each(s)

Screw

Pick: Packing Kit

Qty Part Number

Description

Batch

4

AN526-1032R9

Screw

or AN526C1032R9

M12241

Not in Bar code

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

AN960JD10L

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : ~~40.0000~~ 24 Each(s)

Washer

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10L Washer M104885

JS 08/05/30 (Xb)

22.0

MS21919DG5

Clamp



Comment: Qty.: 2.0000 Each(s)/Unit Total : ~~20.0000~~ 12 Each(s)

Clamp

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21919DG5 Clamp M11325

or MS21919WDG5

* Batch not in comp

JS 08/05/30 (Xb)

23.0

MS354899

Grommet



Comment: Qty.: 1.0000 Each(s)/Unit Total : ~~10.0000~~ 6 Each(s)

Grommet

Pick: Packing Kit

Qty Part Number Description Batch

1 MS35489-9 Grommet M9619

JS 08/05/30 (Xb)

24.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

JS 08/06/02 (Xb)

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-558-043

Location:

PPP Rev:

Rev - F

8/6/2

SD

30 (Xb)

26.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/06/04 JS

Job Completion



mif 08-06-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

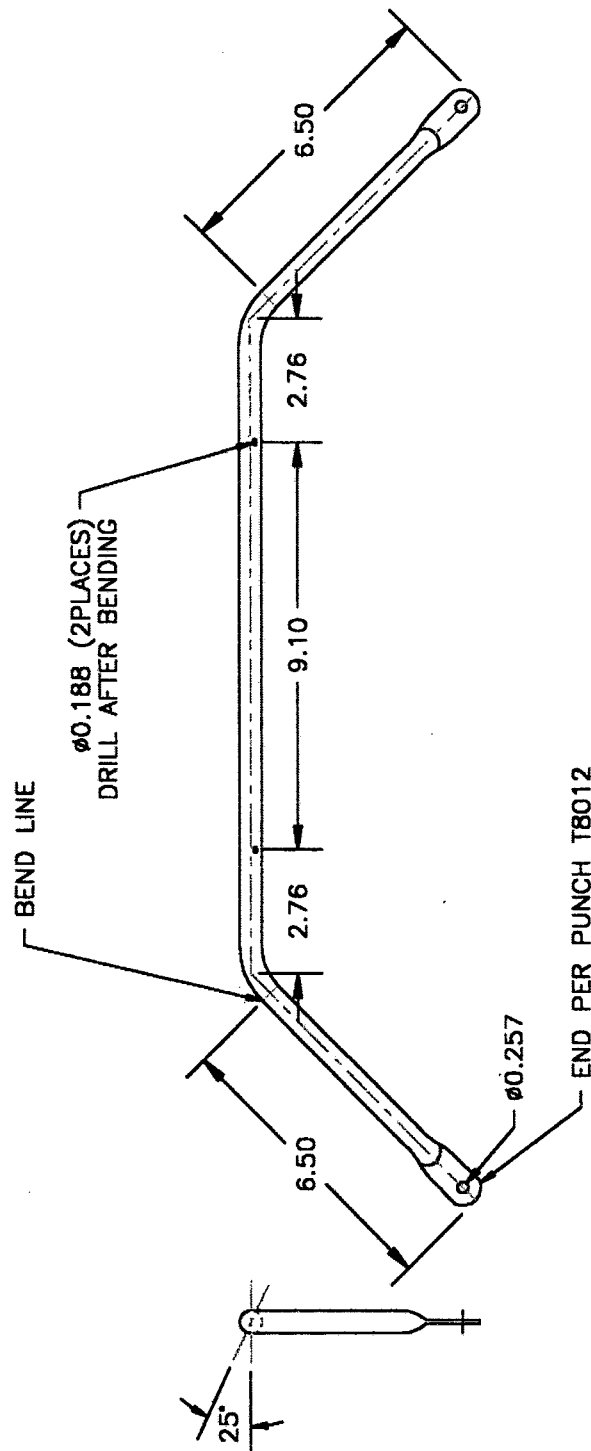
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART



DESIGN	DRAWN BY	DART AEROSPACE LTD	
B WILLIAMS	B WILLIAMS	VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. B
BW	GA	D2066	SHEET 1 OF 1
DATE		TITLE	SCALE
92.03.12		ARM	1:4
B	96.02.06	RE-DESIGNED	



D2066 CUT LENGTH 28.62
NOTE:
ADD D2052,D2055,D2056
D2054 TO ARM BEFORE
ENDS ARE PUNCHED AND
ARM IS BENT

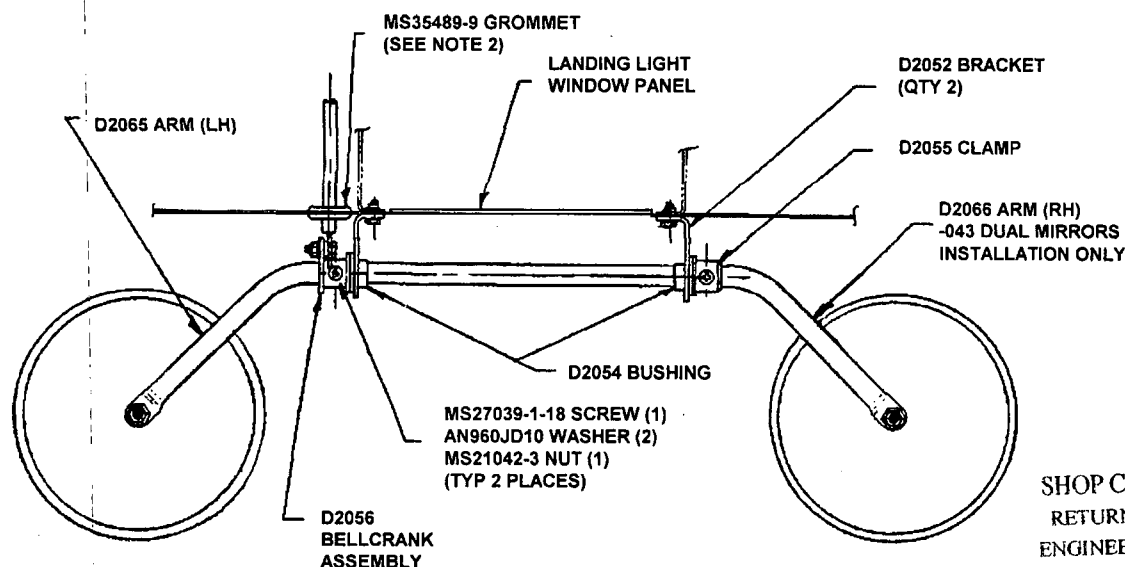
MATERIAL: 304/316 SS 1/2 OD X 0.035 WALL

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NO. 31518

3.0 CARGO MIRROR INSTALLATION

Install the Cargo Mirror as follows:

1. Install D206-558-041/-043 cargo mirror assembly using AN3-4A bolts and AN960JD10L washers. Pickup existing anchor nuts in 4 places.
2. Install D2067 connector onto D2056 bellcrank assembly to locate hole for MS35489-9 grommet. With the mirror in the deployed position, mark and drill $\varnothing 0.125"$ (3.2mm) hole in landing light window panel where the grommet should be located. Open pilot hole to $\varnothing 0.563"$ (14.3mm). Install grommet.
3. Install D2053 bracket using AN526-1032R9 screws. Pickup on existing anchor nuts.
4. Position D2071 cable as shown. Install MS21919DG5 clamps using AN526-1032R9 screws where required. Pickup existing rivnuts or anchor nuts if available.
5. Install D2071 control cable using D2067 connector. Connector should rotate freely in bellcrank when MS21042-3 nut is torqued and cable clamped



**Figure 2: – View A: Looking Aft.
(D206-558-043 Mirror Shown)**

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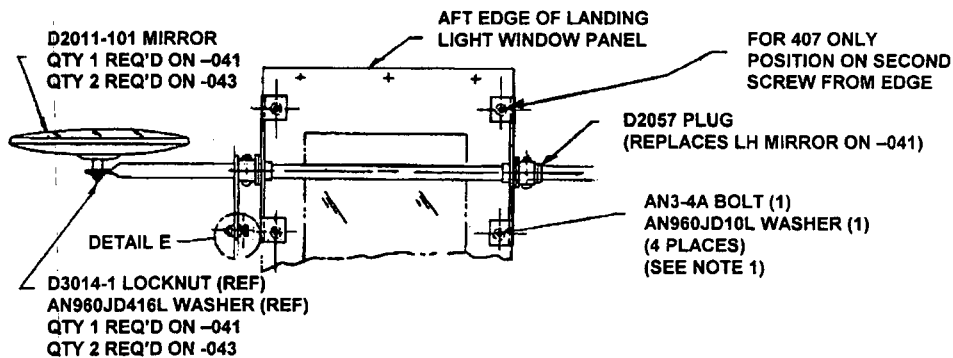


Figure 3: – View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

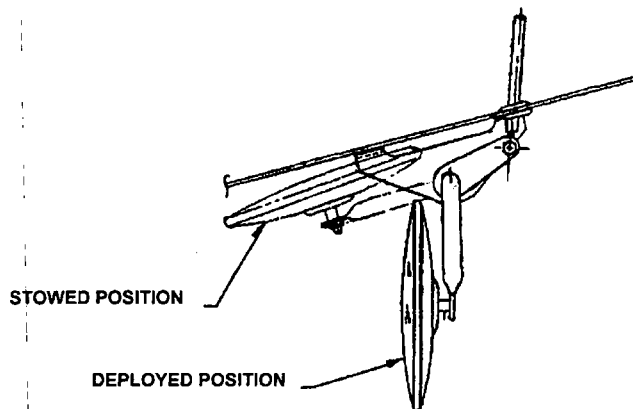


Figure 4: – Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

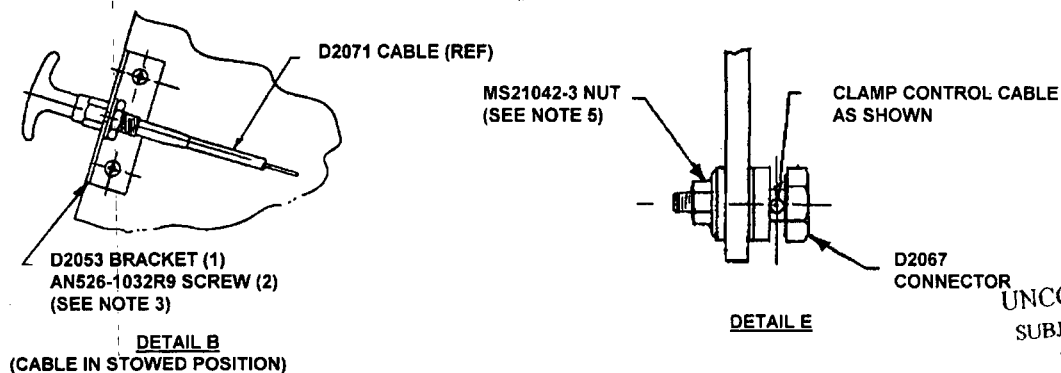


Figure 5: – Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

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4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041 Bell 206A/B/L/L1/L3/L4 Bell 407	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D206-558-043 Bell 206A/B/L/L1/L3/L4 Bell 407	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg

5.0 WEIGHT AND BALANCE

Qty -041	Qty -043	Part Number	Description
X		D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X	D206-558-043	DUAL CARGO MIRROR ASSEMBLY
1	2	D3014-1	* LOCKNUT
1	1	D2071	CABLE ASSEMBLY
2	2	D2054	BUSHING
1	1	D2067	CONNECTOR
	1	D2066	ARM
1		D2065	ARM
1		D2057	PLUG
1	1	D2056	BELLCRANK ASSEMBLY
1	1	D2055	CLAMP
1	1	D2053	BRACKET
2	2	D2052	BRACKET
1	2	D2011-101	MIRROR ASSEMBLY
4	4	AN3-4A	BOLT
4	4	AN526-1032R9	SCREW
1	2	AN960JD416L	* WASHER
4	4	AN960JD10	WASHER
6	6	AN960JD10L	WASHER
3	3	MS21042-3	NUT (or MS21042L3)
2	2	MS21919DG5	CLAMP
2	2	MS27039-1-18	SCREW
1	1	MS35489-9	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

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